

## CLAIMS:

1. A method for *in vivo* expression of an immunogen comprising:  
administering an inactivated host cell to a mammal, wherein said host cell comprises a polynucleotide encoding an immunogen, and wherein the immunogen is expressed *in vivo* by the mammalian cells.
2. The method of claim 1 wherein the host cell is inactivated by heat treatment.
3. The method of claim 1 wherein the host cell is inactivated by ultra-violet light exposure.
4. The method of claim 1 wherein the host cell is inactivated by hydrogen peroxide treatment.
5. The method of claim 1 wherein a plasmid comprises the polynucleotide encoding the immunogen.
6. The method of claim 1 wherein the polynucleotide encoding the immunogen is incorporated into the host cell genome.
7. The method of claim 1 wherein the expressed immunogen generates an immune response in the mammal.
8. A method of generating an immune response in a mammal comprising:  
administering an inactivated host cell to said mammal, wherein said inactivated host cell comprises a polynucleotide encoding an immunogen.
9. The method of claim 8 wherein the host cell is inactivated by heat treatment.
10. The method of claim 8 wherein the host cell is inactivated by ultraviolet light exposure.
11. The method of claim 8 wherein the host cell is inactivated by hydrogen peroxide treatment.
12. The method of claim 8 wherein a plasmid comprises the polynucleotide encoding the immunogen.
13. The method of claim 8 wherein the polynucleotide encoding the immunogen is incorporated into the host cell genome.

14. A composition comprising an inactivated host cell that comprises a polynucleotide encoding an immunogen.
15. The composition of claim 14 further comprising a pharmaceutically acceptable solution.
16. The composition of claim 14 further comprising a pharmaceutically acceptable carrier.
17. A method of making an inactivated host cell comprising:
  - (i) transforming a host cell with a vector comprising a polynucleotide encoding an immunogen; and
  - (ii) inactivating the host cell.
18. The method of claim 17 wherein the step of inactivating is performed by heat treatment.
19. The method of claim 17 wherein the step of inactivating is performed by ultraviolet light exposure.
20. The method of claim 17 wherein the step of inactivating is performed by hydrogen peroxide treatment.
21. The method of claim 17 wherein the inactivated host cells are detoxified.
22. The method of claim 21 where the detoxification is by genetic manipulation of the host cells' lipopolysaccharide synthesis genes.